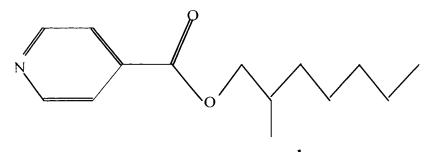
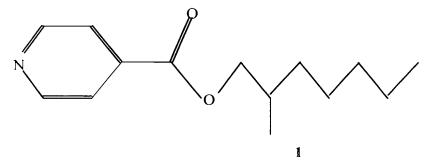


1. A novel antifungal antibacterial compound 2-methylheptylisonicotinate of formula 1 below obtained from natural sources.

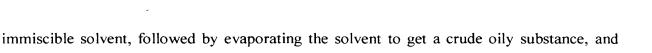


- 2. A compound as claimed in claim 1 wherien the compound of formula 1 is obtained from *Streptomyces* sp. 201.
- 3. A process for the isolation of a novel antifungal antibiotic compound 2-methylheptylisonicotinate of formula 1 below



said process comprising growing *Streptomyces* species 201 in a nutrient medium and isolating the compound of formula 1 therefrom.

- 4. A process as claimed in claim 3 wherein nutrient medium comprises Throntons medium.
- 5. A process as claimed in claim 4 wherein the Throntons medium comprises the following ingredients in g/L: Dipotassium hydrogen phosphate (K₂HPO₄) 0.8 to 1.5, potassium nitrate (KNO₃) 0.3 to 1.0, magnesium sulfate (MgSO₄) 0.1 to 0.4, calcium chloride (CaCl₂.2H₂O) 0.0.5 to 0.2, asparagine 0.2 to 0.7, mannitol 0.1 to 2.0, sodium chloride (NaCl) 0.05 to 0.3, ferric chloride (FeCl₃) 0.01 to 0.05 at pH in the range of 6.5 to 9.0.
- 5. A process as claimed in claim 4 wherein the Throntons medium comprises of the following ingredients in g/L: K₂HPO₄ 1, KND₃ 0.5, MgSO₄ 0.2, CaCl₂.2H₂O 0.1, asparagine 0.5, mannitol 0.1, NaCl 0.1, EeCl₃ 0.01 at pH of 7.4.
- 6. A process as claimed in claim 3 wherein *Streptomyces* sp.201 is grown on nutrient agar at pH 7 to 9 for a period of 6 days followed by inoculating in Throntons medium at a pH in the range of 7 to 9 for at least 3 days, the culture broth being then extracted with a water



7. A process as claimed in claim 3 wherein nutrient agar has the following ingredients in g/L: beef extract 2.5 to 6.0, peptone 3.5 to 7.0, potassium nitrate 0.8 to 1.4, agar 14 to 23.

purifying the 2-methylheptylisonicotinate from the crude oil.

- 8. A process as claimed in claim 3 wherein growing and inoculation are effected at a temperature in the range of 28 to 32°C.
- 9. A process as claimed in claim 3 wherein extraction of broth is effected by a water immiscible solvent selected from the group consisting of hydrocarbons such as hexane, heptane, petroleum ether, benzene and toluene, halogenated solvents selected from chloroform, dichloromethane and ethylene dichloride and lower acid esters such asmethyl acetate, ethyl acetate and propyl acetate.
- 10. A process as claimed in claim 3 wherein the purification is done by by chromatographic methods.
- 11. A process as claimed in claim 3 wherein yield of compound of formula 1 2-methylheptylisonicotinate is 2.5 mg from 500 ml of cell free culture filtrate.
- 12. A method of treatment of tuberculosis comprising administering to a animal a pharmaceutically acceptable dose of compound of formula 1 or a pharmaceutically acceptable derivative thereof.

